development has not been satisfactory. In Western Ukraine small mills continued to operate with an output in 1932 of about 4 million t flour (and 170 000 t barley groats). 256

The oil industry manufactured native products and is best developed in the Kuban area. In 1934, 90 000 t oil were produced, and in Dnipro-Ukraine 58 000 t = about 40 % of the total production for USSR. Large oil plants have been constructed since then in Slovjanske, Dnipropetrovske and Krasnodar. 258

More than ¾ of the canned food required for the whole of Russia was produced in Ukraine. There are plans for a large-scale development of this industry. 255

Breweries and distilleries are not yet developed; out of a total number of 225 distilleries, 151 are in Galicia, but they supplied about 40 % of the Soviet production before the first Five-Year Plan. 274

There were about 80 tobacco factories before World War I, with an output of 9 000 t; in 1927/28 there were only 26 factories which produced more than 20 milliard cigarettes, i. e. 360 000 t = 36 — 54 % of the production for USSR. 277

10. Other Branches of Industry

Slate production in Ukraine increased from 2 000 t in 1913 to 14 500 t in 1931; the raw material was manufactured in two plants in Zavalla and Mariupil. 339

A highly developed cement industry in Novorossijske (10 plants) used to produce 633 000 t annually. In 1934, 5 of the plants there produced 1 million t, and with Dnipro-Ukraine 1.5 million t = 45 % of the total production of USSR. Ukraine must come eight in world production. In Dnipro-Ukraine and North Caucasia in the same year, 940 000 t of fire-proof earthenware and dinas bricks were produced, 924 000 t lime, 220 000 t chalk, 207 000 t alabaster and 37 000 t gypsum.

Excellent kaolin is found in Dnipro-Ukraine. In 1913 34 400 t and in 1931, 78 500 t were produced. In 1928 the 11 porcelaine factories in the country had an output of 18 700 t (⅓ of total 323

339 To finish with heavy industries, let us still mention the production of building materials—600,000 tons of cement (in the region of the Sea of Azov) and 1 milliard of bricks are annually manufactured in the Ukraine.

258 As for light industry, it is that of food production which occupies the first place.

257 The sugar industry of the whole of Russia is to be found almost entirely in the Ukraine. 12,000,000 quintals of crystallized sugar and 4,000,000 quintals of refined sugar can be produced here annually.

256 The milling industry also occupies an important place. Very important mills, many of which are supplied with highly perfected means of sifting and straining, specialized in the manufacture of fine flours for export before the last war. This industry is concentrated in the ports or in the towns near these or near river ports and in the surroundings of important railway junctions of the southern region. This industry represents 35 per cent of the whole milling industry of the Union and produces, despite the fact that it is not working at full pressure, 2,500,000 tons of wheat flour per annum.

249 The oil mills of the Ukraine produce 40,000 tons of sunflower oil, 3000 tons of linseed oil, and 3000 tons of mustard oil.

274 70 per cent of the alcohol distilleries of the Soviet Union are also in the Ukraine, manufacturing all types of alcohol: from corn, for drinks such as vodka and other liqueurs, and from potatoes, for the dye industry, for pharmaceutical products, and for perfumery.

277 The very important tobacco industry is distributed throughout the great centres of the territory.

255 As for the production of tinned foods, 78 per cent of the production of the Union originates from the Ukraine. Important quantities of vegetables (especially of tomatoes) and of fruit are tinned and exported from the territory.

9: Prothero G-4 (no date) 1920 RD1 Ukraine RD1

ing both from abroad and from other parts of Russia. The two principal exceptions to this rule are manufactured food-stuffs, and heavy iron and steel products.

Sixty-eight per cent. of the manufactured products of the country consist of food-stuffs. The industries contributing to this output are various, including flour-milling, sugar-refining, and those dependent wholly or partly upon sugar, such as confectionery, fruit-preserving, distilling from molasses, brewing, and wine-making. Most of the undertakings concerned have only a small capital, and are situated near the source of their raw material. In the neighbourhood of Kiev, however, sugar-refining and its dependent industries are carried on in large works, many of which are capitalized from abroad.

The close conjunction of the Donets coalfield and the iron and manganese deposits has enabled the Ukraine to be almost entirely self-supporting in iron and steel manufactures of the first categories, and to supply the wants of the remainder of Russia as well. Pig-iron, bar-iron, roof-iron, steel rails, axles, tubes, and assorted merchant iron are all made in the iron-works which have been established in increasing numbers on the coal and iron fields. These works are seldom in large centres of population, but as a rule in small towns and villages, some of which owe their existence to the need of housing for the labour employed.

The output of raw iron and steel in the first stage of manufacture under the headings of Bessemer and Thomas bars, Martin-process bars, cast-iron and steel billets, and cast-iron tubes, was in 1906 1,300,000 tons, and in 1910 1,900,000 tons. The output of iron and steel in the second stage of manufacture, under the headings of T and H beams, rails, sheet-iron, rolled wire, roof-iron, trusses, springs, assorted merchant iron and axles, was in 1906 1,010,000 tons, and in 1910 1,602,258 tons. In the former year the output in both stages was equal to about 45 per cent., and in the latter year to about 55 per cent., of the total Russian output.

433 became /165/ "Red Progress, Dnepropetrovsk", and so on. The giant tractor factory in Khar'kov was newly erected, an accomplishment which is proudly shown to every foreign visitors. Important, however, is not only the number of tractors that leave the factory, but also their serviceability and durability. The significance of the industrial plants which have remained from the pre-war period is also evident from the invested capital, according to which, just as before, the iron industry ranks first, coal second and the sugar industry third. In these three industries half of the entire capital invested in Ukrainian industry is combined. Only after that come machine construction and the chemical works which to a certain extent have arisen only in most recent times. (106)

106. Kubiyovich: Commentary to the Atlas, page XXXIII.

257 The sugar industry forms only a part of the food and luxury industry which was a very important branch even before the war. Its center is in the beet-growing region between Podolia, Kiyev and Khar'kov. In 1913 200 Ukrainian sugar factories produced 1.2 million tons of sugar, in 1933 170 factories produced 0.8 million tons. (107)

107. Deminskiy, The Economy of the Ukraine, page 140.

258 Besides that there is, also dating back to the pre-
274 war period, a considerable mill and oil industry, the latter in the Kuban region, as well as distilleries.

*

369 The increase of urban population is a natural concomitant of industrialization. The Ukraine has

727
241
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648 Nevertheless, the 1945 harvest - assisted by land-lease supplies which were still then available, and (beginning in December 1945) by UNRRA relief deliveries - was furnishing the population a fair amount of cereals and bread. There was, however, very little meat from domestic sources, and only a small amount of fats and oils, as the following table shows.

TABLE XII

Ukraine: Production and Utilization of Fats and Oils, 1945.
(thousand metric tons)

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262

	Oilseeds	
Production		
Total production of oilseeds		496.4
Deduction for seed		53.6
Available for processing		442.8
Utilization		
388 Total production of oil		105.8
Deduction for industrial use (soap manufacture, etc.)		26.7
Available for human consumption		
by urban population	29.0	
by rural population	50.0	
Total		79.1
Average consumption		Kilograms per person per year
urban population		2.41
rural population		1.86
Average		1.98

[p287]

TABLE XII (Continued)

727
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238
262

Animal fat

Production		74.7
Imports		12.5[1]
Available for consumption		
by urban population	32.7	
by rural population	54.5	
Total		87.2
Average consumption		Kilograms per person per year
by urban population		2.73
by rural population		2.0
Average		2.19

Summary (Oils and Fats)

All fat and oil resources		
Vegetable oils	105.8	
Animal fats	74.7	
Total production	180.5	
Imports	12.5[1]	
Available for distribution	193.0	
Consumption		
Technical purposes	26.7	
Food		
Urban	61.7	
Rural	104.6	
Total food	166.3	
Total consumption	193.0	
Average consumption		Kilograms per person per year
by urban population		5.14
by rural population		3.86
Average		4.17

1 Available from Lend-lease

Source: Ukrainian Department of UNRRA Supplies, Kiev, May 15, 1946.